

**Exemption No. 7650**

**UNITED STATES OF AMERICA  
DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
RENTON, WASHINGTON 98055-4056**

In the matter of the petition of

**Schwartz Engineering Company**

for an exemption from § 25.813(e) of Title 14,  
Code of Federal Regulations

Regulatory Docket No. **FAA-2001-9943**

**GRANT OF EXEMPTION**

By letters dated May 30, 2001, and July 14, 2001, Mr. Peter A. Schwartz, Jr., President, Schwartz Engineering Company, 115 Kestrel Drive, Spring Branch, Texas 78070, petitioned for an exemption from § 25.813(e) of Title 14, Code of Federal Regulations (14 CFR). The petitioner has requested the exemption in order to permit the installation of interior doors between passenger compartments on one private-use Boeing Model 767 airplane.

**The petitioner requests relief from the following regulation:**

**Section 25.813(e)** - prohibits the installation of doors between passenger compartments.

**The petitioner's supportive information is as follows:**

**"BACKGROUND"**

"Schwartz Engineering Company (SEC) requests that the relief granted to Boeing Model 737-700IGW airplanes relative to interior doors between passenger compartments, as described in Exemption Number 6820A, be expanded to include Boeing Model 767-200, S/N 28270.

## “DISCUSSION

“CFR Part 25 of the Federal Aviation Regulations governs design certification of Transport Category aircraft. The primary intent of these regulations, as written, is to be certain that Aircraft Manufacturers provide for the appropriate design features in their respective aircraft to meet the standards necessary to protect the traveling public. Clearly, there is a requirement ‘in the public interest’ and in the interest of safety to provide regulatory guidelines for certification. However, it is also very clear these regulations are intended to regulate the certification of ‘commercial’ aircraft, which are ‘for hire’ to the general public. Schwartz Engineering Company believes that the design of an aircraft for ‘Private Use’ operation justifies the issuance of an exemption to allow the desired interior arrangement because the current FARs do not cover, or even consider, this type of design and operation. Further, SEC believes that the FAA must develop a new ‘view’ of this type of design and operation, that will allow the owner and/or operator the appropriate design and operational flexibility.

“The FAA Partial Grant of Exemption for the B737-700IGW with interior doors (with provisions) should also be granted to the B767-200. The desired privacy for private areas such as bedrooms, offices and conference rooms can only be achieved with the addition of doors that separate them from the rest of the aircraft. Therefore, an exemption is needed to allow the full use of the airplane capabilities without compromising the safety of those onboard.

## “PETITION

“We respectfully request the FAA to issue an additional Exemption for the subject aircraft to FAR 25.813 (e), which prohibits the installation of doors between passenger compartments, to allow for the installation of the customer desired doors. This Exemption is required to accommodate the owner-specified custom interior installation.

## “BASIS FOR EXEMPTION

“The aircraft that is the subject of this petition is a 767-200 which was modified by the Owner selected completion facility, Jet Aviation in Basel, Switzerland, to its present configuration. The interior was approved under STC No. ST09479SC. It is a privately owned and operated aircraft.

The seating configuration as installed in the subject aircraft provides for occupiable passenger seats for thirty seven (37) passengers. This represents only 14% of the capacity allowed for this aircraft. The total passenger seats installed in the aircraft are forty nine (49). There is no intent now, or in the foreseeable future, to change the interior configuration on the aircraft as installed.

Of the thirty seven passenger seats that are occupiable for Taxi, Takeoff, and Landing (TT&L), twelve are located in the three aft Cabanas (compartments) in which it is desired to have doors installed. There are four additional seats located in a forward office which is, at present, not to be occupied for TT&L due to the presence of a door between this compartment and the hallway.

We concur with the FAA's decision to include FAR Part 25.813(e) in Exemption Numbers 6820 and 6820A for 'Special Use, not-for-hire' aircraft and we believe that this exemption should be extended to the B767-200 aircraft.

"Other factors to take into account:

- "1. The door design contemplated incorporates all features that are required by Exemptions 6820 and 6820A. They have dual latches (the installation of each one has been analyzed to be able to withstand the required forces of FAR 25.561) to secure them in the open position, cockpit annunciation has been included, and the door design is such that it is frangible in the event that it should become stuck in the closed position.
- "2. It has been acknowledged by the FAA, with caveats, that the passengers on this type of aircraft are typically the same people on most trips. Familiarity with the aircraft layout and operation goes a long way towards providing a level of safety that is equivalent to that which would obtain absent the doors.

#### "IN THE PUBLIC INTEREST

"The approval of this Petition for Exemption would demonstrate the FAA's willingness to deal with the issues involved with this Exemption, and would be in the Public Interest for the following reasons:

- "1. There is no degradation of safety involved with this request and therefore no detrimental impact to the public at large; and
- "2. Given the proliferation of Executive Configured Transport Category Aircraft currently taking place, and anticipated in the near future, this type of exemption will enable US manufacturers of transport category aircraft greater flexibility to effectively compete in this expanding market; and
- "3. Additional sales of US manufactured transport aircraft outside the traditional airline market can only serve to increase profitability of US airframe manufacturers, giving greater job stability to the workers employed by those manufacturers; and
- "4. Greater stability of a work force as significant as the US aircraft manufacturers represent can only result in additional fuel to stabilize the economy of the US due to the normal household activity associated with stable workers; and

- “5. Stability and improved financial performance of the US airframe manufacturers translates into increased orders and stability in numerous other supporting manufacturing organizations; and
- “6. Increased sales of these executive configured transport aircraft will ultimately result in some portion of those aircraft being completed at US owned or operated Aircraft Completion Facilities, providing improved financial performance and work force stability for those organizations as well; and
- “7. Improved financial performance of US owned or operated corporations, and increased work force stability translates into continued and improved tax revenues for all governmental organizations involved; and
- “8. Improved financial performance allows US corporations to continue to invest in new R & D research which will allow the US to maintain or improve it’s competitive position in the world economy; and
- “9. A large number of these types of sales can be predicted to be to ‘offshore’ clients, improving the US Balance of Trade Deficit significantly.

#### **“PUBLIC COMMENT**

“The customer for this airplane has been flying a greatly reduced passenger load (from 49 PAX to 37) for over two years because of an inability to gain approval for occupying the three compartments that are the subject of this Petition. Due to the granting of Exemption Number 6820A, these compartments should now be acceptable. SEC believes that requiring the owner of this airplane to wait the additional time required for the publication and comment period before being allowed the full use of his aircraft, after having already waited more than two years, is unnecessary. Further, Schwartz Engineering Company does not believe that there is any interest among the general public in the outcome of this Petition for Exemption and therefore requests that its publication in the Federal Register and Period for Public Comment be waived.”

#### **Notice and public procedure provided:**

On August 14, 2001 (66 FR 42700), the FAA published notice of the petition for exemption in the Federal Register and requested comments from the public. No comments were received in response to the notice.

#### **The FAA’s analysis/summary is as follows:**

Differences exist between commercial and private use operation (whether by an individual or a corporation) of transport category airplanes that warrant consideration of the appropriate level of safety needed for each use. The FAA is giving great attention to the issues raised when these airplanes are operated in private use. In recognizing the differences between commercial and private use operations, the FAA has identified several regulatory requirements, including the subject of this petition, that may need to be

revised to address the safety issues revealed by these differences. The FAA is currently reviewing the adequacy of the current regulations and in the future may propose revisions to the requirements, where appropriate.

The current regulations allow the installation of interior doors, provided that passengers are not seated on both sides of the door during takeoff and landing. The FAA has safety concerns regarding doors that are located between passengers and exits. The FAA has proposed to prohibit such installations in future designs, as detailed in Notice of Proposed Rulemaking 96-9 (61 FR 38551, July 24, 1996). However, until the regulations are revised, such doors may continue to be installed without the need to process a petition for exemption. Additionally, the FAA has recently issued exemptions for private use airplanes that would permit installation of doors between passenger compartments, provided that certain limitations are met. The petitioner has proposed these limitations as part of this petition.

While a grant of exemption cannot be said to provide the same level of safety that would be afforded were there strict compliance with the regulations, the resultant level of safety is consistent with other private use airplanes. In addition, the level of safety that results from this exemption is specifically requested and desired by that segment of the public, namely the owners, who will fly on these airplanes. The FAA also notes that no other parties have expressed an interest in this petition.

With respect to the possibility that a door will remain closed when it should not be, the FAA believes that a higher level of awareness is required to address this issue. Due to the relative complexity of the cabin interior, the FAA does not believe that inspection by flight attendants prior to takeoff and landing is sufficient to verify that interior doors are in their proper position. Consequently, some type of remote indication is considered necessary; the petitioner's proposal to provide remote indication to the flightcrew is considered adequate.

With respect to the integrity of the means used to latch doors open for takeoff and landing, the FAA considers that redundant means are necessary, as proposed. Each latching means should have the capability of retaining the door in the takeoff and landing position under the inertia forces of § 25.561. In addition, the FAA believes that the door must be frangible, in the event that it is closed, or closes, during an emergency landing. Frangibility may be demonstrated in accordance with the criteria set forth in Advisory Circular 25-17, paragraph 43b(2).

After considerable deliberation, the FAA has concluded that the installation of interior doors that span the main cabin aisle can be allowed with certain limitations. In order to maximize the level of safety, the FAA will require that certain limitations be made mandatory to permit such installations. The FAA will require that the doors installed across the main cabin aisle open and close in a transverse direction; that is, the direction

of motion of the door must be at a right angle to the longitudinal axis of the airplane. A “pocket door” is one example of such a design. This will tend to minimize the chance that the inertia forces of an accident could force the door closed. The FAA will also require that notification of the existence of the doors be provided to passengers who are flying on the aircraft for the first time. These conditions will assure an adequate level of safety for occupants in private aircraft operations. As noted previously, there are precedents for this decision involving other private use airplanes.

### **The Grant of Exemption**

In consideration of the foregoing, I find that a grant of exemption is in the public interest and will not adversely affect the level of safety provided by the regulations. Therefore, pursuant to the authority contained in 49 U.S.C. 40113 and 44701, delegated to me by the Administrator, Schwartz Engineering Company is hereby granted an exemption from 14 CFR 25.813(e). This exemption is granted to the extent necessary to allow installation of interior doors between passenger compartments on Boeing Model 767-200 S/N 28270, and is subject to the following provisions:

1. The airplane is not operated for hire or offered for common carriage. This provision does not preclude the operator from receiving remuneration to the extent consistent with 14 CFR part 125 and 14 CFR part 91, subpart F, as applicable.
2. Each door between passenger compartments must be frangible.
3. Each door between passenger compartments must have a means to signal to the flightcrew when the door is closed. Appropriate procedures/limitations, to ensure that takeoff and landing is prohibited when any such door is not in the proper takeoff and landing configuration, must be established.
4. Each door between passenger compartments must have dual means to retain it in the open position, each of which is capable of withstanding the inertia loads specified in 14 CFR 25.561.
5. Doors installed across a longitudinal aisle must translate laterally to open and close.

6. When doors are installed in specified egress paths, each passenger must be informed that the airplane does not comply with the occupant safety requirements mandated for the airplane type in general. This notification is only required the first time that a person is a passenger on the airplane.

Issued in Renton, Washington, on October 19, 2001.

Ali Bahrami  
Acting Manager  
Transport Airplane Directorate  
Aircraft Certification Service